

Analysis of NASEM study recommendations on methods of detecting soring

Recommendation	Analysis	Consistent with/contained in final 2017 rule, Horse Protection; Licensing of Designated Qualified Persons and Other Amendments (Docket No. APHIS–2011–0009)?
<p>Recommendation 2-1: In line with the USDA OIG’s recommendation in 2010, the committee strongly recommends that use of DQPs for inspections be discontinued and that only veterinarians, preferably with equine experience, be allowed to examine horses, as is done in other equine competitions.</p>	<p>Desirable; this change would be accomplished via the passage of PAST or reinstatement of the 2017 final rule.</p>	<p>Yes; this is contained in the 2017 final rule.</p>
<p>Recommendation 2-2: If the limited budget for HPA enforcement necessitates continued use of third party inspectors, they should be veterinarians or equine industry professionals who are screened for potential conflicts of interest and are trained to inspect by APHIS, not by HIOs. This is in line with the rule proposed by APHIS in 2016 and finalized in 2017 but not yet implemented. Training should be done by experienced equine veterinarians,</p>	<p>Desirable; this change would be accomplished via the passage of PAST or reinstatement of the 2017 final rule.</p>	<p>Yes; this is contained in the 2017 final rule.</p>

and strict competency evaluations should be conducted to assess the skills and knowledge of trainees before they are given license to inspect horses. Consequences for performing a substandard examination should be strictly enforced, and reports of substandard performance and letters of admonishment should come from APHIS, not HIOs.		
Recommendation 2-3: APHIS should adhere to 9 C.F.R. § 11.4(h)(2), which states that reexamination of the horse shall only be granted if the show veterinarian (not the competitor or any other persons) finds sufficient cause.	Desirable; “show veterinarian” refers in the regulations to the APHIS Show Veterinarian (not a veterinarian hired by the show). Current USDA policy is that a reexamination will be granted at the request of the competitor or other persons.	Yes; not inconsistent with the rule. Already contained in the regulations. USDA would just need to change current policy to adhere to the regulations.
Recommendation 2-4: In digital palpation of distal limbs, the extent of digital pressure need not be prescribed, provided that experienced equine veterinarians are performing the inspections. Use of palpation from the carpus distally to determine the presence or absence of limb sensitivity is well established in other equine competitions. Horses with limb sensitivity in these competitions must be withdrawn for the welfare of the horse and safety of the rider.	Desirable; USDA has been prescribing/limiting the amount of pressure used during palpation, which could result in false negatives.	No; although the current guidance prescribing the amount of pressure to be applied is not contained in the existing regulations (but is instead USDA policy), the 2017 final rule prescribes the amount of pressure to be applied (blanching of the thumbnail). To adopt Recommendation 2-4, USDA would need to remove the prescription for blanching of the thumbnail.
Recommendation 2-5: Owing to physiological changes that occur	Desirable; USDA policy has been that horses must be repeatedly	Yes; not inconsistent with the regulatory changes in the rule.

<p>after repeated stimulation of a painful area, inspection protocols should be based on current knowledge of pain perception and should exclude the requirement that horses be repeatedly sore in a specific area to be disqualified.</p>	<p>found to be sore in a specific (same) area during an inspection to be disqualified, which has the potential to result in false negatives during palpation.</p>	<p>The guidance that horses must be repeatedly sore in a specific area is not contained in the pre-2017/current CFR regulations, but is instead USDA policy. This policy can be revised without rulemaking.</p> <p><i>However, the explanatory language in the rule does say that “(t)he <u>evidence of soring includes, among other things, a horse’s repeated and consistent pain withdrawal responses upon digital palpation,</u> and/or evidence of inflammation (such as proliferating granuloma tissue on the posterior aspect of the pasterns) beyond “some loss of hair,” as observed in the Auburn study.” (emphasis added)</i></p> <p>This does not indicate that such repeated response is required to indicate soreness. However, if USDA decides to adopt this recommendation it may want to delete this reference in the explanatory language.</p>
<p>Recommendation 2-6: To detect prohibited substances, swabs should be done on a random sampling of horses or on horses that the VMO identifies as</p>	<p>Desirable, and consistent with current USDA policy (though such testing has been greatly reduced in recent years).</p>	<p>Yes; not inconsistent with the rule. The guidance that horses should be swabbed to detect prohibited foreign substances is not contained in the pre-</p>

suspect from observations made on the grounds of the horse show.		2017/current CFR regulations, but is instead USDA policy, and could be continued/expanded.
Recommendation 2-7: Thermography should be reinstituted in the inspection of TWHs.	Desirable, and consistent with previous USDA policy (though such testing has been greatly reduced or eliminated in recent years).	<p>Yes; not inconsistent with the rule. The provision for the use of thermography is not contained in the pre-2017/current CFR regulations (other than the provision that management must provide sufficient space in which horses may be physically, thermographically, or otherwise inspected), but is instead USDA policy.</p> <p>Use of thermography is not inconsistent with current regs or the final rule and is implicitly anticipated by virtue of the provision requiring management to provide space for such form of inspection.</p>
Recommendation 2-8: Serious consideration should be given to testing blood of TWHs, using USEF's rules and guidelines as a model, to detect medications administered to alter TWH response to palpation and for overall protection of TWH welfare and ensuring fair competitions. This would include	Desirable; USDA has in the past conducted blood testing to determine the presence of medications administered to alter TWH response to palpation – with no known consequences or penalties upon a positive finding. It is well known that exhibitors use these medications	<p>Yes; not inconsistent with the rule. Blood testing results could provide evidence supporting a finding of soreness in combination with other evidence.</p> <p>If the intent of this recommendation is that the</p>

random selection of horses, identified by microchip, at shows or sales. Championship shows should require testing of winning horses as well as randomly selected competing horses.	to mask pain and avoid detection.	finding of a prohibited substance in a horse via a blood test would cause the horse to be considered sore or in violation of the HPA, the regulations would need to be changed to reflect that.*
Recommendation 3-1: Designating an inspection area that has as few distractions as possible will reduce the effect of the environment on the horse's response to pain during examination. It is important that inspectors observe the horse's response to the show environment and to restraint before starting the inspection and consider the horse's behavior in the decision-making process.	Desirable; this would reduce factors that could influence the horse's response to pain during examination, reducing false negatives and industry complaints of false positives.	Yes; not inconsistent with the rule. Pre-2017/current CFR regulations require show management to "(p)rovide sufficient space in a convenient location to the horse show, horse exhibition, or horse sale or auction arena, acceptable to the APHIS Show Veterinarian, in which horses may be physically, thermographically, or otherwise inspected." APHIS can through policy prescribe what inspection area conditions are acceptable and also, that the inspector should observe the horse's response to the environment and restraint prior to the inspection.
Recommendation 3-2: To help improve accuracy of soreness detection, the inspector should ensure that custodians are following guidelines that prohibit stewarding while the horse is being inspected and should closely monitor horse custodians for violations.	Desirable; stewarding continues to be a means of evading detection of soring.	Yes; not inconsistent with the rule. This is already contained in the regulations. Could be reinforced through policy.

<p>Recommendation 3-3: Pain assessment using facial expressions is a new area of research, and scientific investigations of these methods have not been performed in TWHs. However, evidence supports the use of facial expressions of pain as supplemental information if video is available to review or if a second inspector is present.</p>	<p>Desirable; a valid finding of a pain response based on a horse's facial expression will provide additional evidence of pain and strengthen any case pursued against violators.</p>	<p>Yes; not inconsistent with the rule. Assessment of facial expression of pain is a diagnostic tool that can be used to support a finding that the horse is sore. This can be adopted through USDA policy.</p>
<p>Recommendation 3-4: To improve consistency across inspectors, science-based information about behavioral indicators of pain in horses should be incorporated into inspectors' training.</p>	<p>Desirable, as is any improvement in consistency across inspectors.</p>	<p>Yes; not inconsistent with the rule. This can be adopted through USDA policy.</p>
<p>Recommendation 3-5: Research is needed to study validity and potential utility of using facial grimace for assessing pain in TWHs and to distinguish pain from other sources of distress. To accomplish this, researchers could, under show conditions, apply new clinical pain assessment technologies and score the horse's behavior and facial expressions during the inspection. Facial expressions of pain are expected to correlate with findings from other currently used methods to detect soreness, such as palpation. For this</p>	<p>Desirable; a valid finding of a pain response based on a horse's facial expression will provide additional evidence of pain and strengthen any case pursued against violators.</p>	<p>Yes; not inconsistent with the rule. Assessment of facial expression of pain is a diagnostic tool that can be used to support a finding that the horse is sore. This can be adopted through USDA policy.</p>

purpose, it is important to capture the horse's head in the inspection videos.		
<p>Recommendation 3-6: The decision to disqualify a horse due to soreness should be driven by an experienced veterinarian, such as a VMO, and should be based on diagnosis of local pain detected on palpation but should also include a more thorough gait or lameness assessment to identify other sources of pain. Signs of pain that should be observed include excessive quietness or restlessness, low head carriage, weight shifting, pointing a front limb or resting a hind limb, standing hunched over or camped out and looking at a painful area, bruxism, sweating, and muscle fasciculations.</p>	<p>Potentially desirable. The addition to the inspection protocol of more methods to detect other indicia of pain may provide additional evidence of pain, strengthen any case pursued against violators and address industry complaints of subjectivity in the inspection process – desirable outcomes. However a finding that a horse is sore or non-compliant with the HPA should not be dependent on the finding of multiple indicia of pain; finding of pain/non-compliance via palpation alone should continue to suffice.</p>	<p>Yes; not inconsistent with the rule. Some inspection protocols are contained in the regulations (specifically, on palpation and examination of the horse's movement while walking and turning); others are USDA policy and not contained in the regulations. However, the regulations specifically apply to inspections conducted by DQPs, not VMOs.</p> <p>USDA could add to its policy additional tests for other indicia of pain, but not make them prerequisites for a finding that a horse is non-compliant.</p>
<p>Recommendation 4-1: Regardless of why the scar rule was written with limited information and limited expertise in pathological changes in the skin, the committee recommends that the rule be revised. The committee's proposed language is as follows: A trained inspector should examine skin of the front limb of the horse from the knee (carpus) to the hoof with particular attention to skin of pastern and</p>	<p>Desirable; this confirms the ongoing need for the scar rule, aligns the language with current knowledge of how tissue changes may occur and be detected, expands the prohibited conditions and broadens the uniform application of the rule to the entire pastern. There are however some concerns with the NASEM-proposed scar rule language. These are detailed in the analysis below.</p>	<p>No; this is not contained in the rule and would require further rulemaking.</p>

<p>fetlock and the coronary band. All areas of skin from carpus to hoof of both limbs should be free of foreign substances such as dyes, hair fillers, ointments, and other substances designed to camouflage scar rule violations during pre and post-show inspections. Detection of previously approved substances such as lubricants during post-competition inspection does not constitute a violation. There should be no chemical smell emanating from the skin and no substance present that can be rubbed off onto the hands or a cloth. Skin should be haired with no areas of loss of hair, patchy or diffuse. There can be no swelling, redness, excoriation, erosions, ulcers, seeping of fluids, or signs of a response to chronic injury such as epidermal thickening or presence of scales. Photo documentation of lesions, identifying information about the horse, and a date should be provided for any horse determined to be or suspected of being in violation of the scar rule.</p>		
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* A horse found with a violation of the scar rule (as contained in the regulations) is defined as a sore horse, in violation of the HPA. However, a horse found with pain masking drugs in its system (as identified by a blood test) is not identified in the regulations as a horse that is sore or in violation.

Analysis of NASEM recommended scar rule language

From NASEM report:

“Conclusion 4-5: The scar rule language needs to be based on what can accurately be assessed by a gross examination, which ideally would only be performed by an experienced equine practitioner.

Recommendation 4-1: Regardless of why the scar rule was written with limited information and limited expertise in pathological changes in the skin, the committee recommends that the rule be revised. The committee’s proposed language is as follows:

A trained inspector should examine skin of the front limb of the horse from the knee (carpus) to the hoof with particular attention to skin of pastern and fetlock and the coronary band. All areas of skin from carpus to hoof of both limbs should be free of foreign substances such as dyes, hair fillers, ointments, and other substances designed to camouflage scar rule violations during pre and post-show inspections. Detection of previously approved substances such as lubricants during post-competition inspection does not constitute a violation. There should be no chemical smell emanating from the skin and no substance present that can be rubbed off onto the hands or a cloth. Skin should be haired with no areas of loss of hair, patchy or diffuse. There can be no swelling, redness, excoriation, erosions, ulcers, seeping of fluids, or signs of a response to chronic injury such as epidermal thickening or presence of scales. Photo documentation of lesions, identifying information about the horse, and a date should be provided for any horse determined to be or suspected of being in violation of the scar rule.”

Analysis:

- There are several changes that would make the proposed rule stronger and/or more appropriately applicable. For the language in Recommendation 4-1 above:
 - In sentence 1, the inspector should examine skin of both front limbs (plural) of the horse as in the NASEM proposal, but the inspector should not be limited to examining skin of only the front limbs; horses have been known to be sores on the hind limbs and inspectors have found conditions violative of the scar rule on those limbs.
 - The stated bilateral prohibition in sentence 2 only applies to the presence of the listed foreign substances. It would be preferable to say that that and the other conditions (hair loss, swelling, etc.) apply to all limbs inspected.
 - Currently the scar rule requires a violative change to the skin to be found on both limbs. If a violative condition found on the skin of only one limb were to constitute a violation under a new rule, this could prevent a horse with a scar caused by an accidental injury from being eligible to compete.
- If this proposed rule language was intentional:

- Is it possible for the types of tissue changes and responses to chronic injuries that would be prohibited by the proposed rule to have been created accidentally, rather than intentionally through soring?
- If so, does this create the risk that horses that have suffered accidental injuries on only one limb would be disqualified even though they were never sored?
- If so, this could put horses with accidental injuries at risk of being devalued and potentially dumped by their owners.
- Would it be possible to allow for an accidental injury (on one limb only) to be present, if a licensed equine veterinarian provides a letter stating that they treated the horse for the injury and know that the cause was accidental (or something along those lines)?
- The same terminology should be used in sentences 2 and 3: either “post-show” or “post-competition”. That language should also apply to sales and exhibitions, e.g. “post-sale” and “post-exhibition”.
- The third sentence suggests that a pre-show detection of approved substances *would* constitute a violation. If that’s the intent, should this be stated clearly?
- The fourth sentence prohibits the presence of a substance that can be rubbed off onto the hands or a cloth, but the previous sentence allows for approved substances post-show. This exception would need to be modified to make it clear that approved substances are allowed post-show.
 - If a new rule prohibits the use of action devices (as did the 2017 final rule, and which we strongly support), then there is no need for approved lubricants and the presence of all substances including lubricants should be prohibited.
- Sentences 2, 3 and 4 discuss the presence of foreign substances but do not specifically reference soring agents or substances used to numb the skin to avoid detection of pain during palpation. While the scar rule may not be the appropriate place to mention those specifically, they might be prohibited by the term “no substance present that can be rubbed off onto the hands or a cloth”. Is §11.2 (c) in the regulations (see below) sufficient to cover soring and numbing agents?
- “Should” or preferably “must” should be used consistently in sentences 2, 4, 5 and 6, but not “can”.
- More information should likely be collected for any horse determined to be or suspected of being in violation of the scar rule, including but not limited to a description of the finding, location on each foot that a violative condition exists, etc.

Further analysis regarding foreign substances (including soring, numbing and camouflaging agents), which are by default currently prohibited under USDA regulations:

“§11.2 (c) *Substances*. All substances are prohibited on the extremities above the hoof of any Tennessee Walking Horse or racking horse while being shown, exhibited, or offered for sale at any horse show, horse exhibition, or horse sale or auction, except lubricants such as glycerine, petrolatum, and mineral oil, or mixtures thereof...”

- This prohibition is not stated in the current scar rule (however some but not all substances would be prohibited by specific reference in the NASEM-proposed scar rule). Given that foreign substances are addressed elsewhere in the regulations (§11.2 (c)) and that foreign substances may have been applied for some other illicit reason than to camouflage scar rule violations (e.g., to sore the horse or numb the skin to avoid the detection of pain during inspection), would it be advisable to expand the prohibition at §11.2 (c) to include some of the types of substances that are prohibited? Such as “All substances (including but not limited to substances known to be used to sore horses, numb the skin of horses or camouflage scar rule violations) are prohibited on the extremities...”.
 - It may need to be specified that this prohibition in §11.2 (c) applies during inspections – or even anywhere on the grounds of the covered event - not just while the horse is being shown, exhibited or offered for sale. Also, given that horses being inspected after a class could still have approved lubricants (for the action devices) on their limbs, it may need to be clarified that the approved lubricants (only) may be present during post-show inspections. If a new rule prohibits the use of action devices (as did the 2017 final rule, and which we strongly support), then there is no need for approved lubricants and the presence of all substances including lubricants should be prohibited.
 - If a new regulation includes prohibitions concerning Spotted Saddle Horses, the language at §11.2 (c) should be modified to specifically mention that breed also.